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CLAIMS

- A method of processing images, comprising applying an anisotropic diffusion process
 to the image, the anisotropic diffusion process being adapted in dependence upon the
 contrast in the image.
 - 2. A method according to claim 1 wherein a diffusion coefficient in the anisotropic diffusion process is adapted in dependence upon the contrast in the image.
- 3. A method according to claim 2 wherein the diffusion coefficient is calculated from the local contrast in the image.
 - 4. A method according to claim 3 wherein the diffusion coefficient is calculated from an average value of the local contrast in the image.
 - 5. A method according to any one of claims 1 to 4 further comprising the steps of deriving a Gaussian derivative of the image and applying said anisotropic diffusion process to the SMF image.
- 6. A method of processing images to segment objects in the image from background comprising applying a foveal segmentation algorithm to the image in which areas of the image are assigned to an object if the local contrast is greater than a minimum contrast value, wherein the minimum contrast value is defined with respect to the contrast in the image.
 - 7. A method according to claim 6 wherein the minimum contrast is calculated from an average value of the local contrast in the image.

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- 8. A method according to claim 6 or 7 wherein the local contrast is calculated from a weighted sum of the image intensities in the object and in the image.
- 9. A method according to any one of claims 6 to 8 further comprising the steps of
 5 deriving a Gaussian derivative of the image and applying said foveal segmentation algorithm to the SMF image.
 - 10. A method according to claim 4, 7 or 8 wherein the average value of the local contrast in the image is calculated over the whole image.

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- 11. A method according to any one of claims 1 to 5 further comprising sementing the processed image using the foveal segmentation method of any one of claims 6 to 10.
- 12. A method according to any one of the preceding claims wherein the image is an x15 ray image.
 - 13. A method according to any one of the preceding claims wherein the image is a medical image.
- 20 14. A method according to any one of the preceding claims wherein the image is a mammogram.
 - 15. A method according to claim 13 further comprising the steps of identifying areas of the processed image as representing microcalcifications.